

REMARKS

The Office Action dated September 4, 2003 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. Claims 1, 2 and 4-7 are pending in this application and have been examined.

Applicants note that the previous prior art rejection was withdrawn and claims were rejected over newly cited prior art. Claims 1, 2 and 4-6 have been rejected under 35 U.S.C. § 102(a) as being anticipated by *Lucent Technologies* (EP 0801513). Claim 7 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Lucent Technologies* in view of *Korpela* (USP 5,946,634) or *Takese et al.* (USP 5,963,555). The above rejections are respectfully traversed according to the remarks that follow.

The present invention is directed to, according to claim 1, a broadband cellular network device. The device includes a base station control unit adapted to control distribution of asynchronous transfer mode cellular traffic consisting of asynchronous transfer mode cells and an asynchronous transfer mode controller, separate from the base station control unit, connected to and being controlled by the base station unit. The device also includes an asynchronous transfer mode switching means connected to and being controlled by the asynchronous transfer mode controller and adapted to switch asynchronous transfer mode cellular traffic. The asynchronous transfer mode controller is arranged to function between the base station control unit and the asynchronous transfer mode switching means and is arranged to provide an interface for converting commands of a first communication protocol issued by the base station controller unit

into commands of a second communication protocol causing switching actions and being an interface for issuing commands for connecting and disconnecting traffic channels passing through the asynchronous transfer mode switching means.

Lucent Technologies is directed to four stages of digital cellular architecture that reuse much of the existing voice infrastructure while allowing introduction of data and integrated voice/data services over industry standard, low cost platforms. A separate ATM-based infrastructure is introduced that supports data services and a new data call control is introduced on industry standard hardware platforms using object oriented and modular programming. Additionally, ATM is introduced at radio ports and call control functions are migrated to the new ATM-based call control platforms. Applicants respectfully assert that *Lucent Technologies* fails to teach or render obvious the subject-matter of claimed invention.

The Office appears to consider, in the rejection of claims 1, 2 and 4-6, the elements 28, 48 (see Fig. 3) of *Lucent Technologies* to be equivalent to a base station control unit, and furthermore considers the ATM switching fabric control 51 of *Lucent Technologies* to be equivalent to an ATM controller (or protocol converter) as in the present application. However, one of the important differences between *Lucent Technologies* and the present invention is that, as one can see, the ATM switching fabric control unit element 51 of *Lucent Technologies* is inside the switch 46 which is directly connected to the element 48 (see Fig. 3) and thus it is not making any protocol conversions.

Contrary thereto, it is an idea of the present invention to be able to offer the same switches for base station controllers implementing different control protocols. In the present invention, the control of the switching fabric is inside the cellular switch, as can be seen from Fig. 1 of the drawings of the instant invention. Additionally, claim 1 recites, in part, that "the asynchronous transfer mode controller is arranged to function between the base station control unit and the asynchronous transfer mode switching means and is arranged to provide an interface for converting commands . . . issued by the base station controller unit into commands of a second communication protocol."

In *Lucent Technologies*, the call control functionality (element 28) directly controls the ATM switching fabric control 24. There is no ATM control element which would make protocol conversions in between these two functionalities. See, for example, the Call Setup examples (column 8, lines 34 - 51), or the Datacalls. Data call control 48 is directly connected to the ATM switching fabric control element 51 inside the switch 46. Thus, the ATM switching fabric control unit element 51 of *Lucent Technologies* cannot be equivalent to the asynchronous transfer mode controller recited. Therefore, Applicants respectfully assert that *Lucent Technologies* fails to teach all of the elements of claim 1.

Additionally, one of ordinary skill in the art would not have been motivated to modify the teachings of *Lucent Technologies* to reach the subject matter of the present claims. In *Lucent Technologies*, the control elements 28, 48 are used for call control, authentication, paging, billing and location management functions for the calls, and these

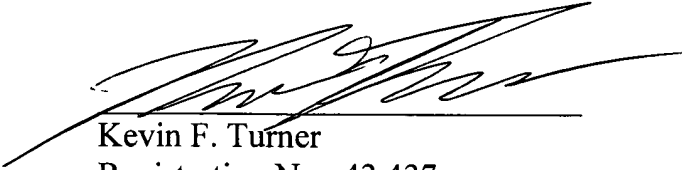
elements are directly signalling with the switches 46 and 10. Thus, the present invention is not needed in the scheme used in *Lucent Technologies*. The present invention would only be of advantage if the switches and ATM switching fabric controls would not understand the protocols used by the call control elements 28 and 48. If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Thus, Applicants respectfully assert that claim 1 would likewise be non-obvious in view of *Lucent Technologies*.

With respect to the rejection of claim 7, even if Applicants accepted that *Korpela* and *Takase et al.* teach what the Office has alleged, neither reference cures the deficiencies of *Lucent Technologies*, as discussed above. As such, Applicants respectfully assert that the rejections of claim 2 and 4-7 are improper for failing to teach all of the elements of those claims by virtue of their dependence on claim 1. Reconsideration and withdrawal are respectfully requested. As such, the Applicants respectfully request allowance of claims 1, 2 and 4-7 and the prompt issuance of a Notice of Allowability.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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